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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/617,193 | 07/11/2003 | Yukiko Yamazaki | 238193US2 | 3525 |

22850 7590 12/21/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
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| EXAMINER |
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ELISCA, PIERRE E

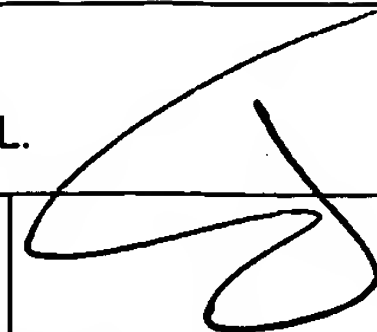
| ART UNIT | PAPER NUMBER |
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3621

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-------------------------------|---------------------------------|
| Office Action Summary | Application No. 10/617,193 | Applicant(s) YAMAZAKI ET AL. |
| | Examiner Pierre E. Elisca | Art Unit 3621 |



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 55-86 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 55-86 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to Applicant's amendment filed on 09/24/2004.
2. Claims 1-54 are canceled and claims 55-86 are added.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 55-86 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Horiike (U.S. Pat. No. 6,744,905) in view of Harrington (U.S. Pat. No. 6,636,616).

As per claims 55, 59-60, 63, 67-68, 71, 75-76, 79, and 83-84, Horiike substantially discloses an image processing apparatus that has an input unit for inputting a plurality set of drawing data representing one frame image a generating unit for generating first intermediate language data representing a watermark to be added to the one frame image and generating second intermediate language data by analyzing the drawing data input from the input unit and a producing unit for producing final print image data, comprising:

An input device configured to input an original image composed of a character (see., see., abstract, col 1, lines 44-67, col 2, lines 15-33, please not that background process

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device is readable as the producing unit of Horiike since his producing unit is for producing final print image data);

A background generating device (see., watermark, abstract, col 1, lines 44-67, col 2, lines 15-33, col 3, lines 22-67, col 4, lines 44-67). It is to be noted that Horiike fails to explicitly disclose that his watermark is a dither and error diffusion methods in accordance with one of a number of bits, a number of lines, and density. However, Harrington discloses a method and apparatus for digital watermarking using error diffusion. The method also includes a plurality of stored pixels representing an image, and a lesser level of gray while attempting to preserve an overall gray density of the images (see., abstract, figs 1-7, col 1, lines 13-67, col 2, lines 1-22, col 3, lines 3-67, col 4, lines 1-62). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the image processing of Horiike by including the limitation detailed as taught by Harrington because this would modify the biasing pattern for pixels that are positioned within the watermark.

As per claims 56-58, 64-66, 72-74, and 80-82, Harrington discloses the claimed limitation wherein the embedding device embeds the information by applying one of pixel and frequency conversions (see., abstract, col 3, lines 46-67, col 4, lines 12-24).

As per claims 61, 62, 69, 70, 77-78, and 85-86 Harrington discloses the claimed limitation wherein the original image is a full-color image and only brightness is processed (see., col 4, lines 12-24).

RESPONSE TO ARGUMENTS

5. Applicant's arguments filed on 09/28/2004 have been fully considered but they are moot in view of new ground (s) of rejection. Necessitated by amendment.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre E. Elisca whose telephone number is 703 305-3987. The examiner can normally be reached on 6:30 to 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 703 305-9769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Pierre Eddy Elisca

Primary Patent Examiner

December 20, 2004